IN THE CLAIMS:

Claims 4-6, 9, 13, 15, 17, 21, 24, 25, 27, 29, 31, 32, 39, and 42 have been amended herein. All of the pending claims 1 through 44 are presented below. This listing of claims will replace all prior versions and listings of claims in the application. Please enter these claims as amended.

1. (Original) A method for producing mRNA encoding Plasmodium AMA-1 ectodomain, or a functional part, derivative and/or analogue thereof, in a yeast cell, said method comprising:

providing said yeast cell with a nucleic acid encoding said ectodomain or functional part, derivative and/or analogue thereof, said nucleic acid being modified to utilize said yeast's codon usage.

2. (Original) The method according to claim 1, further comprising allowing for expression of said Plasmodium AMA-1 ectodomain or functional part, derivative and/or analogue thereof in said yeast cell.

3. (Original) The method according to claim 2, further comprising purifying said Plasmodium AMA-1 ectodomain or functional part, derivative and/or analogue thereof.

4. (Amended) The method according to ~~any one of claims 1-3~~ claim 1, wherein at least one putative yeast polyadenylation consensus sequence in the nucleic acid has been modified.

5. (Amended) The method according to ~~any one of claims 1-4~~ claim 1, wherein at least one site in said Plasmodium AMA-1 ectodomain or functional part, derivative and/or analogue thereof that is generally glycosylated by eukaryotic expression systems, has been removed.

6. (Amended) The method according to ~~any one of claims 1-5~~ claim 1, wherein the Plasmodium belongs to the clade whose members express AMA-1 protein as an approximately 83 kDa protein. 20

7. (Original) The method according to claim 6, wherein the Plasmodium comprises Plasmodium falciparum.

8. (Original) The method according to claim 7, wherein the Plasmodium is Plasmodium falciparum FVO.

9. (Amended) The method according to ~~any one of claims 1-8~~ claim 1, wherein said yeast is Pichia.

10. (Original) The method according to claim 9, wherein said yeast is Pichia pastoris.

11. (Original) An isolated and/or recombinant nucleic acid sequence encoding Plasmodium ANU-1 ectodomain or a functional part, derivative and/or analogue thereof, said nucleic acid being modified to utilize a yeast's codon usage.

12. (Original) The isolated and/or recombinant nucleic acid sequence of claim 11, wherein at least one putative yeast polyadenylation consensus sequence has been modified.

13. (Amended) The isolated and/or recombinant nucleic acid sequence of claim 11 ~~or claim 12~~, wherein at least one site in said ectodomain or functional part, derivative and/or analogue thereof that is generally glycosylated by eukaryotic expression systems, has been removed.

14. (Original) An isolated and/or recombinant nucleic acid sequence encoding Plasmodium AMA-1 ectodomain or a functional part, derivative and/or analogue thereof, said nucleic acid comprising a sequence depicted in Figure 1.

15. (Amended) A nucleic acid sequence, said nucleic acid sequence being an AMA-1 specific nucleic acid sequence and capable of hybridizing to at least a functional part of the nucleic acid sequence of ~~any one of claims 11-14~~ claim 11.

16. (Original) The nucleic acid sequence of claim 15, wherein said hybridization is under stringent conditions.

17. (Amended) A nucleic acid sequence, which is an AMA- ~~I~~ 1 specific nucleic acid sequence, said nucleic acid sequence having at least 50 percent homology to the isolated and/or recombinant nucleic acid sequence of ~~any one of claims 11-14~~ claim 11.

18. (Original) The nucleic acid sequence of claim 17, having at least 60 percent homology to said isolated and/or recombinant nucleic acid sequence.

19. (Original) The specific nucleic acid sequence of claim 17, having at least 75 percent homology to said isolated and/or recombinant nucleic acid sequence.

20. (Original) The nucleic acid sequence of claim 17, having at least 90 percent homology to said isolated and/or recombinant nucleic acid sequence.

21. (Amended) The nucleic acid sequence of ~~any one of claims 11-20~~ claim 11, wherein said Plasmodium belongs to the clade whose members express AMA-1 protein as an approximately 83 kDa protein.

22. (Original) The nucleic acid sequence of claim 21, wherein said Plasmodium comprises Plasmodium falciparum.

23. (Original) The nucleic acid of claim 22, wherein said Plasmodium is Plasmodium falciparum FVO.

24. (Amended) The nucleic acid sequence of ~~any one of claims 11-23~~ claim 11, wherein said ectodomain or functional part, derivative and/or analogue thereof comprises a consensus Plasmodium AMA-I ectodomain or a functional part, derivative and/or analogue thereof.

25. (Amended) The nucleic acid sequence of ~~any one of claims 11-24~~ claim 11, wherein said yeast is Pichia.

26. (Original) The nucleic acid sequence of claim 25, wherein said yeast is Pichia pastoris.

27. (Amended) A process for producing Plasmodium AMA-1 ectodomain or a functional part, derivative and/or analogue thereof, said method comprising:

-providing a yeast cell with the nucleic acid of ~~any one of claims 11-26~~ claim 11 and,

-collecting formed Plasmodium AMA-1 ectodomain or functional part, derivative and/or analogue thereof.

28. (Original) The process of claim 27, further comprising purifying said ectodomain or functional part, derivative and/or analogue thereof.

29. (Amended) The process of claim 27 ~~or claim 28~~, wherein said yeast is Pichia.

30. (Original) The process of claim 29, wherein said yeast is Pichia pastoris.

31. (Amended) A Plasmodium AMA-1 ectodomain or a functional part, derivative and/or analogue thereof, obtainable by a process of ~~any one of claims 27—30~~ claim 27.

32. (Amended) An isolated cell comprising the nucleic acid of ~~any one of claims 11-26~~ claim 11.

33. (Original) The isolated cell of claim 32, further comprising a Plasmodium AMA-1 ectodomain or a functional part, derivative and/or analogue thereof.

34. (Original) A vaccine comprising the Plasmodium AMA-1 ectodomain or functional part, derivative and/or analogue thereof of claim 31.

35. (Original) The vaccine of claim 34 for use in preventing malaria.

36. (Original) The vaccine of claim 34 together with a suitable expedient.

37. (Original) The vaccine of claim 35, wherein said malaria is caused by Plasmodium falciparum.

38. (Original) The vaccine of claim 34, wherein said Plasmodium AAIA-1 ectodomain or functional part, derivative and/or analogue thereof is linked to C3d.

39. (Amended) The vaccine of ~~any one of claims~~ claim 34, wherein the malaria comprises Plasmodium falciparum FVO.

40. (Original) A vaccine comprising a proteinaceous molecule capable of binding a Plasmodium AMA-1 ectodomain or a functional part, derivative and/or analogue thereof.

41. (Original) A method of diagnosing a disease state in a subject, said method comprising using a Plasmodium AMA-1 ectodomain or functional part, derivative and/or analogue thereof of claim 31 to diagnosing the disease state.

42. (Amended) A method for, at least in part, providing prophylaxis against malaria, said method comprising administering the vaccine of ~~any one of claims 34-39~~ claim 34 to a subject.

43. (Original) The method of claim 42, comprising administering to a subject slow release compositions comprising said vaccine.

44. (Original) A method for, at least in part, diagnosing malaria, said method comprising:

collecting a sample from an individual and

providing Plasmodium AMA-1 ectodomain or functional part, derivative and/or analogue thereof according to claim 31 with at least part of said sample.